Canadian Medical Education Journal

Commentary and Opinions

The upside of upstream: trainee-initiated change in medical education

Le bon côté de l'amont : le changement initié par les stagiaires en éducation médicale

Ming K Li,[1] Evan Tang,[1] Calandra Li,[1] Joyce Nyhof-Young[1]

[1]Temerty Faculty of Medicine, [1]University of Toronto, Ontario, Canada

Correspondence to: Ming Li; email: mingml.li@mail.utoronto.ca

Published ahead of issue: January 5, 2022; CMEJ 2022 Available at https://doi.org/10.36834/cmej.73462.

Unfortunately, "I am dissatisfied with my learning experience" is a sentiment often expressed by medical trainees these past two years. The COVID-19 pandemic has replaced learning through the warm presence of a patient with the monotony of "yet another PowerPoint," leaving learners waiting indefinitely for the promised "catching up when things return to normal." As medical students, we have lost count of the times we had been offered this consolation. With the pandemic stretching from weeks into months with no end in sight, we could not help but feel lost in the COVID shuffle. We knew that faculty had been doing the best **they** could, but it was not the best **we** could do, together.

Decisions in healthcare education, training, and policy are often made using a top-down model where "agents of change" make decisions that trickle downstream.[1,2] As medical students, our perception of being on the receiving end of the change process can lessen our sense of agency and promote waiting passively for higher-level intervention and inclusion in change efforts. We often forget Mahatma Gandhi's call to "be the change you wish to see."

At the pandemic's outset, faculty faced immense pressure to quickly convert our in-person curriculum to a virtual one. The urgency of the crisis resulted in the circumvention of student engagement in the process. Interactive components were added to the growing list of deferred skills to "catch up on when things...return to normal." For example, ultrasound training requires a mastery of both image recognition and acquisition. Students recognized that didactic delivery was not conducive to learning excellence, leaving us with questions such as: "Where does the probe go? What side are we on? What are those blobs?"

Instead of waiting for change, students mobilized by approaching faculty members, sharing our experiences, brainstorming potential solutions, and collaborating within student and faculty teams to respond. We developed pilot sessions and solicited student feedback to identify ongoing needs and drive iterative improvement. This resulted in real-time video-conferenced, ultrasound teaching sessions providing simultaneous views of the ultrasound screen, instructor, and patient. It felt as though each student was standing in the room next to the instructor. Learners contextualized how to hold the probe, position the patient, acquire images, and interpret them; all from the comfort of their own homes. Through a bottom-up, student-driven approach to student-faculty collaboration, we became active participants in creating a more robust and meaningful learner experience.

From this experience, we have learned the importance of empowering trainees at every level to be agents of change, dispelling the false dichotomy of 'agent' or 'recipient.' Through this pandemic, we have learned that although it may seem intuitive to side-line junior student partners in a crisis, involving students' voices and input can increase their agency and improve their learning and the curriculum

in turbulent times.[3] Within a healthcare profession calling for lifelong learners, we ask curriculum developers not to overlook the learning we can all gain from one another and implore stakeholders at all levels of medical education to collaborate with trainees to become true champions of change.

Conflicts of Interest: The authors have no conflicts of interest to declare.

Funding: There is no source of funding.

Acknowledgements: The authors thank Dr. Marcus Law, Dr. Fok-Han Leung, and Dr. Claire Heslop for their guidance throughout this process.

References

1. Mukamel DB, Haeder SF, Weimer DL. Top-down and bottom-up approaches to health care quality: the impacts of regulation and report cards. *Annu Rev Public Health.* 2014;35(1):477–97.
2. Gordon L, Cleland JA. Change is never easy: How management theories can help operationalise change in medical education. *Med Educ*. 2021;55(1):55–64.
3. Mehta N, End C, Kwan JCS, Bernstein S, Law M. Adapting medical education during crisis: student-faculty partnerships as an enabler of success. *Med Teach*. 2020 Sep 11;1–2.